Jonathan A. Cooper *et al.*Appl. No. 09/486,293
Amdt. dated September 15, 2005
Reply to Office Action of March 15, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1. (Currently amended) An isolated and purified polynucleotide molecule which encodes mammalian Dab1 (Disabled protein 1) as depicted in SEQ ID NO: 3, or a fragment thereof, wherein the mammalian Disabled protein comprises a phosphotyrosine binding domain and is capable of associating can associate with the SH2 domain of Src, Abl or Fyn, or a complementary sequence thereof.
- 2. (Original) The polynucleotide of claim 1, which is genomic DNA, or a cDNA sequence.
- 3. (Original) The polynucleotide of claim 1, which codes for murine Disabled protein 1 (mDab1).
 - 4. (Canceled)
- 5. (Currently amended) The polynucleotide of claim 1, which hybridizes at 65-68°C in aqueous solution containing 4-6X SSC, or 42°C in 50% formamide combined with washes at a high temperature of 5-25°C below the T_m and at a low salt concentration of 0.1X SSC to an oligonucleotide of 25 or more contiguous nucleotides of SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6, or a complement of said nucleotide sequence, and which codes for a polypeptide comprising a phosphotyrosine binding domain and is capable of associating can associate with the SH2 domain of Src, Abl or Fyn.

Jonathan A. Cooper *et al.*Appl. No. 09/486,293
Amdt. dated September 15, 2005
Reply to Office Action of March 15, 2005

- 6. (Currently amended) A probe which comprises an oligonucleotide capable of specifically hybridizing at 65-68°C in aqueous solution containing 4-6X SSC, or 42°C in 50% formamide combined with washes at a high temperature of 5 to 25°C below the T_m and at a low salt concentration of 0.1X SSC) with a polynucleotide sequence which encodes a mammalian Disabled protein 1 as depicted in SEQ ID NO: 2, or allelic and species variants thereof, wherein the mammalian Disabled protein, allelic or species variant thereof comprises a phosphotyrosine binding domain and can associate with the SH2 domain of Src, Abl or Fyn.
- 7. (Original) The probe of claim 6, which comprises from about 15 to about 60 nucleotides in length.
 - 8. (Original) The probe of claim 6, which further comprises a detectable signal.
 - 9. (Canceled)
- 10. (Currently amended) A DNA construct comprising the following operably linked elements:
 - a transcriptional promoter;
- a DNA sequence encoding a mammalian Disabled protein 1 <u>as depicted in SEQ ID NO: 3</u>, or a fragment thereof which comprises a phosphotyrosine binding domain and is eapable of associating can associate specifically with <u>the SH2 domain of Src</u>, Abl or Fyn; and a transcriptional terminator.
- 11. (Currently amended) The DNA construct of claim 10, wherein the DNA sequence encoding a mammalian Disabled protein 1 is substantially the oligonucleotide sequence depicted as in SEQ ID NO:2, SEQ ID NO:4 or SEQ ID NO:6.

Jonathan A. Cooper *et al.*Appl. No. 09/486,293
Amdt. dated September 15, 2005
Reply to Office Action of March 15, 2005

- 12. (Original) The DNA construct of claim 10, wherein the DNA sequence encoding a mammalian Disabled protein is substantially depicted as residues 107 to 243 of SEQ ID NO:3.
- 13. (Currently amended) A cultured host cell transformed or transfected with a DNA construct which comprises the following operably linked elements:
 - a transcriptional promoter operable in the host cell;
- a DNA sequence encoding a mammalian Disabled protein 1 <u>as depicted in SEQ.</u>

 <u>ID. NO: 3</u>, or a fragment thereof, which comprises a phosphotyrosine binding domain and is eapable of associating and can associate with the SH2 domain of Src, Abl or Fyn; and a transcriptional terminator operable in the host cell.
- 14. (Original) The host cell of claim 13, wherein the host cell is a prokaryotic or eukaryotic cell.
- 15. (Original) The host cell of claim 14, wherein the prokaryotic cell is a bacterial cell.
- 16. (Original) The host cell of claim 14, wherein the eukaryotic cell is a yeast cell or a mammalian cell.
- 17. (Original) The host cell of claim 13, wherein the DNA sequence encodes a murine Disabled protein 1.
- 18. (Currently amended) The host cell of claim 19-13, wherein the DNA sequence encodes a polypeptide as depicted in SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7.
 - 19. 35. (Canceled)